

REMARKS

In amended Figure 1, previously omitted descriptive text labels have been added.

Claims 1-20 are pending in the present application.

The Examiner has rejected claims 7 and 15-18 under 35 U.S.C. § 102(e) as being anticipated by United States Patent application publication 2003/0142674 to Casey (hereinafter "Casey"). The Applicant respectfully disagrees.

Claims 7, 8, 10, 11 and 12 have been amended for clarity. In particular, the identified claims have been amended to distinguish "a layer-1 provider edge device" and "a remote layer-1 provider edge device" as "a first layer-1 provider edge device" and "a second layer-1 provider edge device".

The method of claim 7 requires that a first layer-1 provider edge device uses "BGP and a discovery mechanism" "to distribute received layer-2 VPN information to a second layer-1 provider edge device". For example, when changes occur in a layer-2 VPN to which the first layer-1 provider edge device is attached, the first layer-1 provider edge device may use "BGP and a discovery mechanism" to pass layer-2 VPN information about the changes to the second layer-1 provider edge device to the second layer-1 provider edge device. Advantageously, the second layer-1 provider edge device may then pass the layer-2 VPN information to a device to which the layer-2 VPN information is meaningful, i.e., to an attached layer-2 provider edge device.

The Examiner appears to have identified Core-PE 110 of Fig. 2 of Casey as the first layer-1 provider edge device, which performs the distributing of the layer-2 VPN information, and Core-PE 114 of Fig. 2 of Casey as the remote layer-1 provider edge device, which passes the layer-2 VPN information to another device. However, the Examiner has not indicated where, in Casey, the "layer-2 VPN information" referred to in claim 7 is disclosed being distributed by Core-PE 110 to Core-PE 114. The Examiner appears to indicate that when site #1 of customer A communicates with site #2 of customer A, then there is inherent distribution of "layer-2 VPN information". The Applicant respectfully disagrees.

It is noted that extensions to mBGP-4 and auto-discovery are mentioned, in paragraph [0057] of Casey, as manners by which Core-PE 110 may discover which other Core-PE is in its VPLS Peer Group. However, it is required by claim 7 that BGP sessions and a discovery mechanism be used "to distribute received layer-2 VPN information". Even if, as it appears to be the Examiner's indication, "layer-2 VPN information" flows between Core-PE 110 and Core-PE 114 as a matter of course when site #1 of customer A communicates with site #2 of customer A, there remains no disclosure of the use of BGP sessions and a discovery mechanism to distribute the "layer-2 VPN information" as required by claim 7.

Since, it is submitted, Casey does not disclose or suggest the use of BGP sessions and a discovery mechanism to distribute "layer-2 VPN information", as required by claim 7, it is submitted that claim 7 is not anticipated by Casey. It is respectfully requested that the Examiner remove the rejection of claim 7 on that basis.

Claim 15 has been amended to add an additional limitation. Support for the additional limitation may be found in claim 8 and in paragraph [0038] of the disclosure.

The network of claim 15 includes at least two provider edge devices and requires that one of the at least two provider edge devices "use a discovery mechanism for distributing said layer-2 VPN information".

Since, it is submitted, Casey does not disclose or suggest the use of a discovery mechanism for distributing layer-2 VPN information, as required by claim 15, it is submitted that claim 15 is not anticipated by Casey. It is respectfully requested that the Examiner remove the rejection of claim 15, and claims 16, 17 and 18 dependent thereon, on that basis.

The Examiner has rejected claims 1-6 under 35 U.S.C. § 103(a) as being unpatentable over Casey in view of "*BGP/MPLS VPNs*" by E. Rosen (hereinafter "Rosen"). The Applicant respectfully disagrees.

To establish that any claim is obvious, the Examiner must identify: 1) all of the claimed elements in the prior art; 2) a reason or motivation to combine these elements to arrive at the claimed invention; and 3) a reasonable likelihood of success. (see M.P.E.P. 2141) It is submitted that the Examiner has failed to meet at least the first of these conditions.

A network according to claim 1 is required to have "a first carrier network" and it is required that "layer-1 VPN information" be "created within said first carrier network". The Examiner has identified the backbone network 100 of

Fig. 2 of Casey as providing the first carrier network. However, there is no disclosure or suggestion in Casey that any "layer-1 VPN information" is created within the backbone network 100. Indeed, the only mention, in Casey, of layer-1 technologies is in paragraph [0029] wherein the manners by which a VPLS Service may be realized between a customer edge (CE) and an Edge-PE are discussed.

The Examiner cites Rosen to illustrate that it is known to use BGP to transmit a set of address prefixes at a CE router's site or attributes of routes from CE to PE. Consequently, it is submitted that Rosen does not disclose or suggest "layer-1 VPN information" created within a "first carrier network".

Since neither Casey, nor Rosen, nor a combination of Casey and Rosen, disclose all of the elements of claim 1, the combination of Casey and Rosen may not be used to reject claim 1 as obvious. It is respectfully requested that the Examiner withdraw the rejection of claim 1, and claims 2-6 dependent thereon, on that basis.

The Examiner has rejected claims 19 and 20 under 35 U.S.C. § 103(a) as being unpatentable over Casey in view of Rosen. The Applicant respectfully disagrees.

Claims 19 and 20 depend, indirectly and directly respectively, from claim 15 and provide additional limitations. The Examiner contends that claims 15-18 are anticipated by Casey and that the additional limitations of claims 19 and 20 are provided by Rosen and Official Notice.

As has been discussed hereinbefore, it is submitted that claims 15-18 are not anticipated by Casey in that Casey does not suggest or disclose the use of a discovery mechanism for distributing layer-2 VPN information. It is submitted that Rosen does not suggest or disclose the use of a discovery mechanism for distributing layer-2 VPN information.


Since neither Casey, nor Rosen, nor a combination of Casey and Rosen, disclose the use of a discovery mechanism for distributing layer-2 VPN information, the combination of Casey and Rosen may not be used to reject claims 19 and 20 as obvious. It is respectfully requested that the Examiner withdraw the rejection of claims 19 and 20 on that basis.

In view of the foregoing, the applicant respectfully submits that claims 1-20 are in condition for allowance. Favorable reconsideration and allowance of claims 1-20 are respectfully requested.

Respectfully Submitted,

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By:

A handwritten signature in dark ink, appearing to read 'Colin Climie', is written over a horizontal line.

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